

REMARKS/ARGUMENTS

Claims 1, 4, 5, 9, 16, 22, 25-28, 30 and 35-38 are pending in the application. Claims 1, 9, 16, 22, 25, 28, 30, 37, and 38 are amended. No Claims are cancelled or added. The amendments to the claims as indicated herein do not add any new matter to this application.

IMPROPER FINAL OFFICE ACTION

Applicants respectfully request removal of the finality of the Office Action dated January 5, 2009, which is improperly made final.

“A second or any subsequent action on the merits in any application or patent undergoing reexamination proceedings will not be made final if it includes a rejection, on newly cited art, other than information submitted in an information disclosure statement filed under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p), of any claim not amended by applicant or patent owner in spite of the fact that other claims may have been amended to require newly cited art.” *See* MPEP § 706.07(a).

The Office Action presents new rejections under 35 U.S.C. § 103(a) based on U.S. Patent Publication No. 2003/0191769 (hereinafter “Crisan”) and newly cited art, U.S. Patent Publication No. 2003/0140308 (hereinafter “Murthy”). Applicants do realize that Claim 1 was amended in the last Office Action Response, but only to correct informalities of a misspelling (“retuned” to “returned”) and to add a conjunction word (“and”) that were not made in any way to overcome any prior art and thus MPEP § 706.07(a) should still apply. The Office Action states in the Response to Arguments that “...arguments ... have been considered but are moot in view of the new ground(s) of rejection.” (*Office Action*, p. 2). A review of the prosecution of the present application reveals that Murthy has never been cited by the Examiner in any prior communication. As Murthy was not disclosed by the Applicant or previously cited by the Examiner, Murthy is newly cited art relied upon for the new rejections under 35 U.S.C. § 103(a). Under MPEP § 706.07(a), the Office Action dated January 5, 2009, cannot be made final because the Office Action includes a rejection on newly cited art that was not submitted in an information disclosure statement.

Accordingly, the Applicants respectfully request that the finality of the Office Action dated January 5, 2009 be removed.

INTERVIEW SUMMARY

On Tuesday, March 10, 2009, Applicants, represented by Robert Chee and Marcel Bingham, conducted an interview with the USPTO, represented by Examiner Cam Y. Truong. The Claims of the Application were discussed in relation to the reference, *Crisan*. Applicants agreed to submit a formal reply for further consideration by the Examiner.

CLAIM REJECTIONS--35 U.S.C. § 101

Claims 22, 26-28 and 30 were rejected under 35 U.S.C. § 101 because the claims allegedly fail to place the invention squarely within one statutory class of invention. This objection is respectfully traversed. More specifically, the Office Action states that “On paragraph 0031 of the application, applicant has provided evidence that applicant intends the ‘medium’ to include punch card, paper tape. As such, the claim is drawn to a form of energy. Energy is not one of the four categories of invention and therefore this claim(s) is/are not statutory.” (Office Action, p. 3). First, it is not clear to Applicant how punch cards or paper tape may be considered a form of energy as each are tangible objects (typically made of paper). In any case, Claims 22, 26-28, and 30 recite “a computer readable storage medium”. By stating that each claim is a computer readable *storage medium*, each claim is directed towards a tangible object, and not to any form of energy. As such, Applicant respectfully requests reconsideration of the rejection of Claims 22, 26-28 and 30 under 35 U.S.C. § 101.

Claim 1 has been amended to include the limitation “wherein the method is performed by one or more computing devices.” The inclusion of this limitation is for the express purpose in response to the recent decision of *In re Bilski* and not for the purpose of overcoming any prior art.

CLAIM REJECTIONS—35 U.S.C. § 103

Claims 1, 4-5, 16, 22, 25-28 and 35-37 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Publication No. 2003/0191769 (“Crisan”) in view of U.S. Publication No. 2003/0140308 (“Murthy”). This rejection is respectfully traversed.

One primary difference and advantage of Claim 1 over the references cited is that Claim 1, after the statement is received, executes the second function, and then the first function,

dynamically at runtime. The second function returns the data types that are to be returned by the first function, and these data types are registered by the data processing system, which are then used to compile the statement received. By having the second function dynamically return the data types of the first function, knowledge of the data types do not need to be known when the statement is received. Thus, rather than having to define individual functions (with hard coded data types) for each statement to be performed prior to executing the statement, the statement may be received and *then* the functions computed in order to return the data with the proper data type formatting. *Crisan*, on the other hand, requires the input and output data types prior to generation of User Defined Functions. In *Crisan*, this input and output data types is from Mapping Information (in the form of an XML file) to generate User Defined Functions (par. [0135]). Furthermore, the Office Action identifies the workflow function as analogous to the second function of Claim 1, which, as will be explained below, is simply not the case. *Murthy* does not teach or suggest anything similar.

Claim 1 recites “**before receiving a request to execute a statement that requires computation of a first function, associating the first function with a second function that returns a data type descriptor for the first function**”. The Office Action alleges that *Crisan* paragraphs [0138]-[0142] and [0144]-[0145] teach the cited limitation in Claim 1. The Office Action does not allege that *Murthy* teaches or suggests any such limitation and a review of the *Murthy* reference has shown that no such limitation is taught or suggested in *Murthy*. However, *Crisan* fails to teach “**before receiving a request to execute a statement that requires computation of a first function, associating the first function with a second function that returns a data type descriptor for the first function**”.

Generally, *Crisan* describes a method capable of invoking a flow of operations initiated from an external call. To create a User Defined Function for the external call, Mapping Information (in the form of an XML file), that includes a Mapping Section and a Flow Section defining the structure of the input and output objects of the external functions, is supplied to a Function Generator (*Crisan*, par. [0135]). This indicates that, in *Crisan*, the data types are *not* dynamically generated at runtime by a function.

Paragraphs [0138]-[0142] merely state the information included in the Flow Section 262 (part of the Mapping Information input to the Function Generator). For example, in Fig. 15, the flow name 290 identifies the specific workflow that would be invoked and function 292

indicates whether the function is scalar, table, or spawn. However, the information in the Flow Section is part of Mapping Information that is input into the Function Generator. Paragraph [0144] of *Crisan* describes how the User Defined Function Generator 244 processes the Flow Section 262 of the Mapping Information to determine return values. Paragraph [0145] of *Crisan* describes how the executable UDF causes the invocation of external workflow functions. Thus, based on how the Function Generator is described and that the Mapping Information is supplied in order to generate UDFs, data types are input in *Crisan* to generate a UDF that returns external data. This is not the same as **“before receiving a request to execute a statement that requires computation of a first function, associating the first function with a second function that returns a data type descriptor for the first function”**.

The Office Action analogizes the UDF as the first function of Claim 1 and the workflow function as the second function of Claim 1 (Office Action, p. 5). The analogy does not make sense as the flow section (Mapping Information) is distinct and different from workflow functions (the external function itself). The UDF (first function) does call a workflow function (second function), but this is to *receive source data itself, not the data input and output information*. Thus, a workflow function simply cannot be **“a second function that returns a data type descriptor for the first function”** as recited in Claim 1. Rather, the data input and output information of *Crisan* is from the Mapping Information (more specifically, the Flow Section 262, described above), that is supplied in the form of an XML file in order to generate a UDF. Because the flow section (Mapping Information) is distinct from workflow functions, the analogy made to Claim 1 does not make sense and not all limitations of Claim 1 are taught or suggested by *Crisan* or *Murthy*, either individually or in combination.

As at least one element is not disclosed, taught, or suggested by *Crisan* or *Murthy*, Claim 1 is patentable over the cited art and is in condition for allowance.

CLAIMS 16 and 22

Claim 16 contains limitations similar to Claim 1 except Claim 16 is recited in computer system format. Therefore, Claim 16 is patentable for at least the reasons given above with respect to Claim 1.

Claims 22 contains limitations similar to Claims 1 except Claim 22 is recited in computer-readable storage medium format. Therefore, Claim 22 is also patentable for at least the reasons given above with respect to Claim 1.

DEPENDENT CLAIMS

Claims 4, 5, 9, 25-28, and 30 directly depend upon independent Claims 1, 16, and 22. Therefore, these dependent claims also include the limitations of the independent claim upon which they depend. Thus, dependent Claims 4, 5, 9, 25-28 and 30 are patentable for at least those reasons given above with respect to Claims 1, 16, and 22. In addition, each of Claims 4, 5, 9, 25-28 and 30 introduce one or more additional limitations that independently render it patentable. However, due to the fundamental differences already identified, to expedite the positive resolution of this case a separate discussion of those limitations is not included at this time, although the Applicants reserve the right to further point out the differences between the cited art and the novel features recited in the dependent claims.

CONCLUSION

For the reasons set forth above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a formal Notice of Allowance is believed next in order, and that action is most earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

Please charge any shortages or credit any overages to Deposit Account No. 50-1302.

Respectfully submitted,

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Dated: 4/6/09

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